

IN THE CLAIMS:

1-17 (canceled)

18. (new) An engraving head system, comprising:

at least one engraving head carried by a moveable support;

first and second heat exchangers on the support, the second heat exchanger being positioned to cool the engraving head;

at least two conduits between the first and second heat exchangers for circulating a first coolant between the two heat exchangers; and

the first heat exchanger being cooled by a second coolant.

19. (new) The system of claim 18 wherein the first coolant comprises a coolant liquid and the second coolant comprises air.

20. (new) A system according to claim 18 wherein the first coolant comprises liquid.

21. (new) The system according to claim 18 wherein the first coolant is of a type which is in a gaseous state in the first heat exchanger after returning from the second heat exchanger and is condensed there and supplied as liquid coolant to the second heat exchanger where heating caused by the engraving head causes it to transform into said gaseous state.

22. (new) The system according to claim 18 wherein a plurality of heat pipes are provided between the first heat exchanger and the second heat exchanger.

23. (new) The system according to claim 18 wherein the first heat exchanger and the second heat exchanger directly abut one another.

24. (new) The system according to claim 18 wherein the first and second heat exchangers each comprise a cooling circulation in the form of a coil.

25. (new) The system according to claim 24 wherein the coils have water flowing therethrough.

26. (new) The system according to claim 18 wherein the coolant in the second heat exchanger absorbs heat from ambient air in a region of the engraving head.

27. (new) The system according to claim 18 wherein the first heat exchanger is air-cooled.

28. (new) The system according to claim 18 wherein the first and second heat exchangers have cooling coils therein and the first and second heat exchangers are directly adjacent one another.

29. (new) The system according to claim 18 wherein the first and second heat exchangers each have a cooling circulation coil therein, the first and second heat exchangers directly abut, and the two cooling coils connect to each other by two conduits.

30. (new) The system according to claim 18 wherein the first and second heat exchangers are separated from each other on the support for the engraving head and have rapid action couplings connecting a respective single cooling coil in each of the first and second heat exchangers to one another.

31. (new) The system according to claim 18 wherein a pump is arranged in the first heat exchanger to offer further pump power to a cooling circulation

between respective single cooling coils in the first heat exchanger and the second heat exchanger.

32. (new) The system according to claim 18 wherein a plurality of engraving heads are provided each on their own respective support and independently movable, and wherein each of the supports has first and second heat exchangers thereon.

33. (new) An engraving head system, comprising:

at least one engraving head carried by a moveable support;

first and second heat exchangers on the support closely positioned next to one another, the second heat exchanger being positioned to cool the engraving head with a liquid coolant;

at least two conduits between the first and second heat exchangers for circulating the liquid coolant between the two heat exchangers; and

the first heat exchanger being cooled by air circulation.